

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER NO: 88-174

REQUIRING STAUFFER CHEMICAL COMPANY, MARTINEZ, CONTRA COSTA COUNTY, TO  
CEASE AND DESIST DISCHARGING WASTE IN VIOLATION OF WASTE DISCHARGE  
REQUIREMENTS CONTAINED IN ORDER NO. 88-080 AND THREATENING TO DISCHARGE  
WASTE IN VIOLATION OF THE TOXICS PITS CLEANUP ACT OF 1984, AND ESTABLISHING  
A TIME SCHEDULE FOR COMPLIANCE.

The California Regional Water Quality Control Board, San Francisco Bay Region (herein after called the Board) finds that:

1. Stauffer Chemical Company, a wholly owned subsidiary of Rhone-Poulenc Incorporated (herein after called the discharger) manufactures various grades of sulfuric acid from elemental sulfur, and by regeneration of spent sulfuric acid from area chemical complexes. The plant site is located adjacent to the Carquinez Straits immediately east of the south ramp of the Benicia bridge, at the end of Mococo Road in Martinez, Contra Costa County. A location map is included in Attachment A.
2. Stauffer is located on the site of a former sulfur recovery and copper smelting/extraction operation. Waste products from this operation consisting of cinders and slag were stored on site in two large and several smaller piles. After purchase of the property by Stauffer, waste material was removed from the site to the depth of the water table. However, large quantities of the waste sank into and remain in the soft sediments underlying the facility.
3. Two solar evaporation ponds have been used in the past to store extracted low pH groundwater containing metals leached from the cinders and slag wastes, Order No. 71-21. Currently extracted ground water is not routed to the ponds but rather to a Plant Effluent Purification (PEP) plant for treatment and discharge through the surge and settling ponds to Peyton Slough, pursuant to NPDES permit No. CA0006165, Order No. 85-44. Large quantities of metal bearing sludges and low pH waters remain in the ponds.
4. The solar evaporation ponds are subject to the Toxic Pits Cleanup Act (TPCA) because they contain hazardous wastes and free liquids. The ponds are not within one-half mile of a potential drinking water source. TPCA requires that such ponds not be used for storage of hazardous wastes containing free liquids after January 1, 1989. The discharger will not meet the January 1, 1989 deadline due to the time needed to implement its closure plan for the ponds.
5. The discharger has submitted a closure plan to clean close the solar evaporation ponds by removal of all hazardous wastes. Sludges from the ponds will be resolublized using a combination of rain water, municipal water and untreated PEP plant effluent. The resolublized sludges will then be pumped to the PEP plant for recovery of zinc and iron. Remaining residual pond sludge, solids and contaminated soil

will be acid washed for metals recovery or chemically immobilized for disposal at an appropriate landfill.

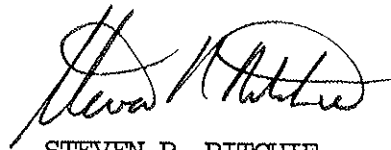
6. The Board adopted Waste Discharge Requirements (Order No. 88-080) on May 18, 1988, which prescribe prohibitions, landfill and surface impoundment closure specification and provisions for geologic and hydrogeologic site characterization intended to permit corrective actions to be designed to protect the waters of the State.
7. Prohibition A.4., of Order No 88-080 states in part: "there shall be no discharge to any surface impoundment ..." The discharger will not be in compliance with this prohibition, but anticipates compliance within 36 months of the date of this order. Continued discharge to the surface impoundments for this extent of time will enable the recovery and reuse of metals from the ponds.
8. The actual and potential beneficial uses of Carquinez Straits and its tributary Peyton Slough are:
  - \* Estuarine habitat
  - \* Water contact and non-contact recreation
  - \* Navigation
  - \* Cold salt water habitat
  - \* Wildlife habitat
  - \* Fish migration
  - \* Fish spawning
  - \* Commercial and recreational sports fishing
  - \* Industrial service supply
9. Closure of the solar evaporation ponds will eliminate a pollutant source thereby preventing potential pollutant migration to adjacent surface waters.
10. The Board finds that this is an order to enforce waste discharge requirements previously adopted by the Board, and to require the discharger to comply with the legal requirements of TPCA. This action is therefore categorically exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to Section 15321 of Title 14 of the California Code of Regulations.
11. The Board has notified the discharger and interested agencies and persons of its intent to issue this Order and has provided them with the opportunity for a public hearing and submit their written views and recommendations.
12. The Board, in a public hearing, heard and considered all comments pertaining to this matter.

IT IS HEREBY ORDERED, pursuant to Section 13301 of the California Water Code, that Stauffer Chemical Company, Cease and Desist from violating Waste Discharge Requirements and from threatening to violate the Toxic Pits Cleanup Act of 1984 as follows:

1. The discharger shall close the solar evaporation ponds in accordance with the approved closure plan as described as closure alternative 4 presented in the report titled "Amended Closure Plan, Two Solar Evaporation Surface Impoundments" (August 1988).
2. The discharger shall submit for approval any variations or modifications of the plan, resulting from technical or operational problems arising during construction of facilities or during closure operations.
3. The discharger shall submit quarterly progress reports detailing operations in progress and problems encountered in implementing his approved closure plan.
4. The discharger shall submit results of quarterly ground water monitoring of the ponds during closure and for one year after clean closure has been completed.
5. After removal of all pond sludges, the discharger shall perform CAM metals analyses of soils underlying the ponds and collect ground water samples. If metals concentrations exceed CAM limits, he shall immediately submit a detailed remediation plan. Stabilized residual sludges and soils for disposal off or on-site shall also be analyzed for leachability of metals to assure that concentrations do not exceed regulatory limits.
6. If the discharger has commenced work under a program approved by the Executive Officer and is in compliance with the schedule of work under this plan, then the discharger shall be deemed to be in compliance with the plan even though all of the work or tasks to be ultimately performed have not been completed.
7. If the discharger is delayed, interrupted or prevented from meeting one or more of the time schedules in this Order due to circumstances beyond his control, the discharger shall promptly notify the Executive Officer. In the event of such delays, the Board will consider modification of the time schedules established in this Order.
8. By September 30 1989, the discharger shall have installed all necessary primary and ancillary PEP plant equipment for recovery of metals from the solar evaporation ponds.
9. By December 1, 1989, the discharger shall have begun operation of the PEP plant, and placed all solids from pond 1-west into the resolublezation basin.
10. By August 31, 1990 the discharger shall have begun treatment of pond 2 liquids and sludges.
11. By December 1, 1990 the discharger shall have commenced treatment of the combined residual solids to separate the remaining soluble metals..
12. By June 1, 1991, the discharger shall have completed treatment and removal of solids and liquids from both ponds 1 and 2, thereby complying with the TPCA cease discharge deadline referred to in Finding 8.

13. By December 31, 1991, the discharger shall have completed liner removal from both ponds; sampled underlying pond soils and water; and submitted for approval a proposal for remediation of soil and/or water contaminant cleanup, if required, to complete closure of both ponds in accordance with a plan acceptable to the Executive Officer.
14. All submittals shall be made as follows: two copies to the Board; one copy to the Department of Health Services, Toxic Substances Control Division; one copy to the Contra Costa Health Services Department; and one copy to the City of Martinez.

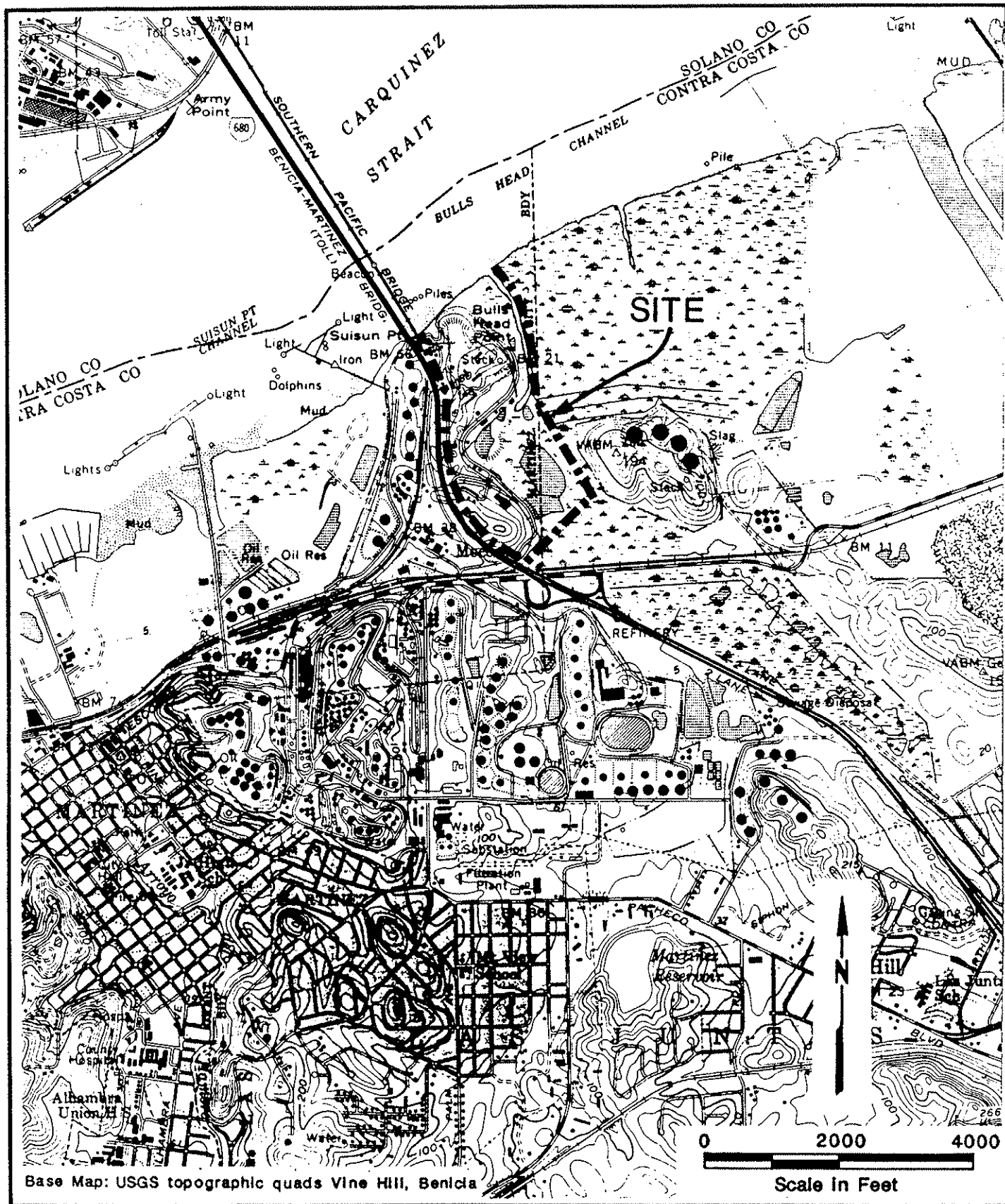
I, Steven R. Ritchie, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on December 21, 1988.



STEVEN R. RITCHIE  
Executive Officer

Attachments:

- A. Site map



SITE LOCATION MAP

Stauffer Chemical Company  
Martinez, California